

03500.017629

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)	
	:	Examiner: Unassigned
MITSURO SUGITA)	
	:	Group Art Unit: 2826
Application No.: 10/527,840)	
	:	Confirmation No.: 1824
Filed: March 15, 2005)	
	:	
For: SENSOR)	October 23, 2007

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SUBMISSION OF INFORMATION

Sir:

Enclosed for the Examiner's information are copies of a Chinese Notification of Second Office Action (dated September 14, 2007) and Korean Notice of Allowance (dated October 5, 2007) that were received in connection with Applicant's corresponding Chinese and Korean applications, respectively.

The documents identified in the Second Office Action and the Notice of Allowance were cited in the Information Disclosure Statements filed March 15, 2005 and February 12, 2007, respectively.

It is submitted that no fee is necessary in connection with this paper.

Nonetheless, any fee deemed necessary should be charged to Deposit Account No. 06-1205.

Appln. No.: 10/527,840

Applicant's undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

/Scott D. Malpede/

Scott D. Malpede
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SDM/vmm

FCHS_WS 1659886v1

THE PATENT OFFICE OF THE PEOPLE'S REPUBLIC OF CHINA

Address: 6 Xi Tu Cheng Lu, Haidian, Beijing

Post Code: 100088

Applicant:	CANON KABUSHIKI KAISHA (キヤノン 株式会社)	Date of Notification: Date: <u>14</u> Month: <u>09</u> Year: <u>2007</u>
Attorney:	FU JIANJUN	
Application No.:	200380101124.9	
Title of the Invention:	SENSOR	

Notification of Second Office Action

- ☒ The examiner received the response submitted by the applicant on Jun. 25, 2007 to the 1st Office Action and further examination as to substance has been carried out on the above-identified patent application for invention on this new basis.
 ☐ According to the Reexamination Decision made by the Patent Reexamination Board of the Patent Office on _____ examination as to substance on the above-identified application has been resumed.
- Further examination as to substance has been carried out based on the documents as specified below:
 ☐ The amended application documents attached to the response to the previous Office Action.
 ☒ The application documents based on which the previous examination was carried out and the substitution pages attached to the response to the previous Office Action.
 ☐ The application documents based on which previous examination was carried out.
 ☐ The application documents confirmed by the Reexamination Decision.
- ☒ No further reference documents are cited in this Office Action.
 ☐ Below is/are the reference document(s) cited in this Notification:

No.	Number(s) or Title(s) of Reference(s)	Date of Publication (or the filing date of conflicting application)
1		Date: __ Month: __ Year: __
2		Date: __ Month: __ Year: __
3		Date: __ Month: __ Year: __
4		Date: __ Month: __ Year: __
5		Date: __ Month: __ Year: __

4. Conclusions of the Action:

- ☒
- On the Specification:
- ☒ The amendments to the description do not comply with Article 33 of the Patent Law.
 - ☐ The subject matter contained in the application is not patentable under Article 5 of the Patent Law.
 - ☐ The description does not comply with Article 26 paragraph 3 of the Patent Law.
 - ☐ The draft of the description does not comply with Rule 18 of the Implementing Regulations.

☒ On the Claims:

- ☒ The amendments to claims 1 do not comply with Article 33 of the Patent Law.
- ☐ Claim(s) _____ is/are not patentable under Article 25 of the Patent Law.
- ☐ Claim(s) _____ does/do not comply with the definition of inventions prescribed by Rule 2 paragraph 1 of the Implementing Regulations.
- ☐ Claim(s) _____ does/do not possess the novelty as required by Article 22 paragraph 2 of the Patent Law.
- ☐ Claim(s) _____ does/do not possess the inventiveness as required by Article 22 paragraph 3 of the Patent Law.
- ☐ Claim(s) _____ does/do not possess the practical applicability as required by Article 22 paragraph 4 of the Patent Law.
- ☐ Claim(s) _____ does/do not comply with Article 26 paragraph 4 of the Patent Law.
- ☐ Claim(s) _____ does/do not comply with Article 31 paragraph 1 of the Patent Law.
- ☐ Claim(s) _____ does/do not comply with the provisions of Rules 20-23 of the Implementing Regulations.
- ☐ Claim(s) _____ does/do not comply with Article 9 of the Patent Law.
- ☐ Claim(s) _____ does/do not comply with the provisions of Rule 12 paragraph 1 of the Implementing Regulations.

The detailed explanation of the above conclusions is set forth in the text portion of the Notification.

5. In view of the conclusions set forth above, the Examiner is of the opinion that:

- ☐ The applicant should make amendments to the application documents as directed in the text portion of the Notification.
- ☐ The applicant should expound in the response reasons why the application is patentable and make amendments to the application where there are deficiencies as pointed out in the text portion of the Notification, otherwise, the application will be rejected.
- ☒ The application contains no allowable invention, and therefore, if the applicant fails to submit sufficient reasons to prove that the application does have merits, it will be rejected.
- ☐

6. The followings should be taken into consideration by the applicant in making the response:

- (1) Under Article 37 of the Patent Law, the applicant should respond to the office action within 2 months counting from the date of receipt of the Notification. If, without any justified reason, the time limit is not met, the application shall be deemed to have been withdrawn.
- (2) Any amendments to the application should be in conformity with the provisions of Article 33 of the Patent Law. Substitution pages should be in duplicate and the format of the substitution should be in conformity with the relevant provision contained in "The Examination Guidelines".
- (3) The response to the Notification and/or revision of the application should be mailed to or handed over to the "Reception Division" of the Patent Office, and documents not mailed or handed over to the Reception Divisions have no legal effect.
- (4) Without an appointment, the applicant and/or his agent shall not interview with the Examiner in the Patent Office.

7. This Notification contains a text portion of 2 pages and the following attachments:

- ☐ ___ cited reference(s), totaling ___ pages. ☐

Examination Dept. 9 Examiner: XIAO Xia

Seal of the Examination Department

Text of the Notification of the Second Office Action

CN Application No. 200380101124.9

After examination, the examiner presents the following comments:

PART I

1. Claim 1 defines a plurality of lasers "in response to" the channels, but the initial description and claims do not mention the laser "in response to" the channels, and the meaning of "in response to" goes beyond the relationship between the lasers and the channels as recited in the initial claims and description, thus, the amended Claim 1 cannot be directly and undoubtedly deduced from the initial disclosure.

Claim 1 defines "from a sole resonance mode of the cavity". However, Pages 13 and 14 of the description only assumably describe "a single mode is present in principle" and "when a leakage quantity is completely 0 and only a single mode is actually used, laser has a threshold current of 0A, since the threshold current is nA and μ A in reality, some leaked light is present", but the embodiments do not mention that the laser uses the "sole resonance mode". Thus, the above technical feature cannot be directly and undoubtedly deduced from the initial claims and description.

Claim 1 recites "the intensity of the light emission from a sole resonance mode of the cavity is changed", but the initial description (see Lines 16-18 of Page 21) only recites that, when a refractive index is largely changed, a threshold value increases to supplied current or more and light emission is stopped. However, increasing the threshold value does not mean the increase of the light intensity and stopping light emission only means that parameters including light intensity and wavelength are stopped; further, the embodiments only mention "changing light emission of the LD" but do not expressly mention the light intensity. Thus, the change in "the intensity of the light emission" as

recited in Claim 1 cannot be directly and undoubtedly deduced from the initial claims and description.

Therefore, the above amendments to Claim 1 do not comply with Article 33 of the CPL. Since the description is adaptively amended, it does not comply with Article 33 of the CPL either.

PART II

Even if the applicant cancels the above features that go beyond the scope, Claims 1-8 still lack inventiveness.

1. Claim 1 seeks to protect a sensor for detecting information for a fluid flowing in a channel and outputting light according to the information. Reference 1 (WO01/40757A2) has disclosed a sensor for detecting information and outputting light according to the information, and has revealed the following technical features: a plurality of channels 14 (see Fig.2B); a plurality of laser cavities 26 which can be shaped as optical microcavities to change a degree of selection of a photoelectromagnetic field mode (corresponds to the "micro-optical cavity", see lines 17-26, page 19 of the description); an active surface 23 which is excited by the electromagnetical field radiated by the transmission port 14 (see line 23, page 13 and lines 12-20, page 15 of the description); the light emission from the cavity is changed according to the information (see lines 9-12, page 20 of the description). Claim 1 differs from Reference 1 in: comprising a plurality of lasers. Although Reference 1 comprises a plurality of cavities instead of a plurality of lasers, those skilled in the art could easily conceive of setting a plurality of independent lasers with a plurality of cavities, based on the plurality of cavities disclosed in Reference 1, without paying out inventive efforts. Therefore, Claim 1 does not possess inventiveness as required by Article 22.3 of the CPL.

2. The additional technical feature of Claim 2 defines the dimension of the channel to be 10 μ m or more, which is well known and commonly used for

those skilled in the art, because those skilled in the art could select a suitable dimension without paying out inventive effort. Therefore, when Claim 1 to which Claim 2 refers does not possess inventiveness, Claim 2 does not possess inventiveness as required by Article 22.3 of the CPL either.

3. The additional technical features of Claims 3 and 4 have been disclosed by Reference 1 (see lines 3-7, page 21 of the description). Therefore, when Claim 1 does not possess inventiveness, Claims 3 and 4 do not possess inventiveness as required by Article 22.3 of the CPL either.

4. The additional technical feature of Claim 5 has been disclosed by Reference 1 (see line 30, page 23 of the description). Therefore, when Claim 3 to which Claim 5 refers does not possess inventiveness, Claim 5 does not possess inventiveness as required by Article 22.3 of the CPL either.

5. The additional technical features of Claims 6-8 belong to the circumstances that must occur during the detection of the sensor. Therefore, when Claim 3 does not possess inventiveness, Claims 6-8 do not possess inventiveness as required by Article 22.3 of the CPL either.

To sum up, the present application has no prospect to be granted a patent right. The applicant shall submit amendments or observations directed to the above defects. It is reminded that, the amendments may not go beyond the scope of the disclosure contained in the initial description and claims. The description shall be adaptively amended according to the amended claims such that the claims are formally supported by the description. If the applicant insists on not making amendments or fails to present convincing arguments, the application will be rejected under Article 38 of the CPL.

Examiner: XIAO Xia

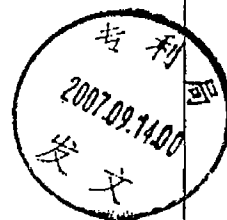


中华人民共和国国家知识产权局

100037

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中国国际贸易促进委员会专利商标事务所
李德山

发文日



申请号: 2003801011249



申请人: 佳能株式会社

发明名称: 传感器

第 2 次审查意见通知书

1. ☒ 审查员已收到申请人于2007年6月25日提交的意见陈述书,在此基础上审查员对上述专利申请继续进行实质审查。

☐ 根据国家知识产权局专利复审委员会于 年 月 日作出的复审决定,审查员对上述专利申请继续实质审查。

☐

2. ☐ 申请人于 年 月 日提交的修改文件,不符合专利法实施细则第51条第3款的规定。

3. 继续审查是针对下述申请文件进行的:

☐ 上述意见陈述书中所附的经修改的申请文件。

☒ 前次审查意见通知书所针对的申请文件以及上述意见陈述书中所附的经修改的申请文件替换页。

☐ 前次审查意见通知书所针对的申请文件。

☐ 上述复审决定所确定的申请文件。

☐

4. ☒ 本通知书未引用新的对比文件。

☐ 本通知书引用下述对比文件(其编号续前,并在今后的审查过程中继续沿用):

编号

文件号或名称

公开日期(或抵触申请的申请日)

5. 审查的结论性意见:

☒ 关于说明书:

☐ 申请的内容属于专利法第5条规定的不授予专利权的范围。

☐ 说明书不符合专利法第26条第3款的规定。

☒ 说明书的修改不符合专利法第33条的规定。

☐ 说明书的撰写不符合专利法实施细则第18条的规定。

☐

☒ 关于权利要求书:

☐ 权利要求 不具备专利法第22条第2款规定的新颖性。

☐ 权利要求 不具备专利法第22条第3款规定的创造性。

☐ 权利要求 不具备专利法第22条第4款规定的实用性。

☐ 权利要求 属于专利法第25条规定的不授予专利权的范围。

☐ 权利要求 不符合专利法第26条第4款的规定。

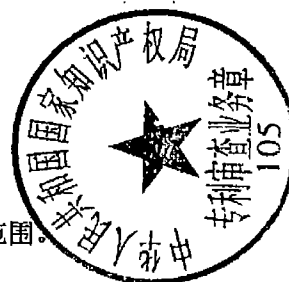
☐ 权利要求 不符合专利法第31条第1款的规定。

☒ 权利要求 1. 的修改不符合专利法第33条的规定。

☐ 权利要求 不符合专利法实施细则第2条第1款的规定。

☐ 权利要求 不符合专利法实施细则第13条第1款的规定。

☐ 权利要求 不符合专利法实施细则第20条的规定。



21303
2006.7



回函请寄: 100088 北京市海淀区蓟门桥西土城路6号 国家知识产权局专利局受理处收
(注: 凡寄给审查员个人的信函不具有法律效力)

申请号 2003801011249

☐ 权利要求_____ 不符合专利法实施细则第 21 条的规定。

☐ 权利要求_____ 不符合专利法实施细则第 22 条的规定。

☐ 权利要求_____ 不符合专利法实施细则第 23 条的规定。

☐

☐ 分案的申请不符合专利法实施细则第 43 条第 1 款的规定。

上述结论性意见的具体分析见本通知书的正文部分。

6. 基于上述结论性意见, 审查员认为:

☐ 申请人应按照通知书正文部分提出的要求, 对申请文件进行修改。

☐ 申请人应在意见陈述书中论述其专利申请可以被授予专利权的理由, 并对通知书正文部分中指出的不符合规定之处进行修改, 否则将不能授予专利权。

☒ 专利申请中没有可以被授予专利权的实质性内容, 如果申请人没有陈述理由或者陈述理由不充分, 其申请将被驳回。

☐

7. 申请人应注意下述事项:

(1) 根据专利法第 37 条的规定, 申请人应在收到本通知书之日起的贰个月内陈述意见, 如果申请人无正当理由逾期不答复, 其申请将被视为撤回。

(2) 申请人对其申请的修改应符合专利法第 33 条和实施细则第 51 条的规定, 修改文本应一式两份, 其格式应符合审查指南的有关规定。

(3) 申请人的意见陈述书和/或修改文本应邮寄或递交国家知识产权局专利局受理处, 凡未邮寄或递交给受理处的文件不具备法律效力。

(4) 未经预约, 申请人和/或代理人不得前来国家知识产权局专利局与审查员举行会晤。

8. 本通知书正文部分共有 2 页, 并附有下列附件:

☐ 引用的对比文件的复印件共 _____ 份 _____ 页。

☐

审查员: 肖霞(9605)

2007 年 8 月 29 日

审查部门 审查协作中心

21303
2008. 7



回函请寄: 100088 北京市海淀区蓟门桥西土城路 6 号 国家知识产权局专利局受理处收
(注: 凡寄给审查员个人的信函不具有法律效力)

第二次审查意见通知书正文

经继续审查，具体意见如下：

(一)

1. 权利要求1中限定多个激光器“响应于”通道，但是原权利要求和说明书中并没有关于激光器“响应于”通道的说明，而且“响应于”的含义大于原权利要求和说明书中激光器与通道之间的关系，因此是从原记载的内容无法直接、毫无疑义的确定的。

权利要求1中限定改变“来自所述腔的单振荡模式”，但是，说明书6页中只是以假设的形式说明“原理上存在单个模式”、“当泄漏完全为0并且实际仅使用单模式时，激光器具有0A的阈值电流。由于……，所以存在一些泄漏光”，并没有在实施方式中说明激光器使用“单振荡模式”，因此从原权利要求和说明书的记载内容无法直接、毫无疑义的确定上述特征。

权利要求1中“改变……光发射的强度”，但是原说明书第10页第5-7行中只是说明了当折射率变化很大时，阈值增加到所供应的电流或更大，并停止发光。而阈值增加并不能说明光强度的增加，而且停止发光只能说明包括光强度、波长等各项参数的停止；再有说明书中其它实施例中也都是“改变LD的发光”，没有明确说明光的强度。因此从原权利要求和说明书的记载内容无法直接、毫无疑义的确定权利要求1中的“光发射的强度”被改变。

因此权利要求1的上述修改不符合专利法第三十三条的有关规定。由于说明书做了适应修改，导致说明书也不符合专利法第三十三条的有关规定。

(二)

如果申请人删除上述超范围的特征，权利要求1-8仍不符合有关创造性的规定。

1. 权利要求1请求保护一种用于检测通道中流动的流体的信息和按照该信息输出光线的传感器，对比文件1(WO01/40757A2)公开了一种用于检测信息和按照该信息输出光线的传感器，并披露了以下技术特征：多个通道14(见2B)；多个激光腔26可以被做成微光腔，按照信息的改变改变光电磁场的选择度(相当于“微光腔”，见说明书第19页第17-26行)；有源层23，受到传输部分14发出的电磁场激励(见说明书第13页第23行和第15页第12-20行)；信息改变来自腔的光发射(见说明书第20页9-12行)。权利要求1与对比文件1的区别在于：包括多个激光器。虽然对比文件1中不是多个激光器而为多个腔，但是对于本领域普通技术人员来说在对比文件1多个腔的基础上完全能够容易想到设置多个具有多个腔的独立工作的激光器，无需创造性劳动。因此权利要求1不符合专利法第二十二条第三款创造性的有关规定。

2. 权利要求2的附加技术特征限定通道的尺寸大于等于10 μm ，这对于本领域普通技术人员来说是公知且常用的，无需创造性劳动便可以选择合适的尺寸，由此权利要求2引用的权利要求1没有创造性时，其也不符合专利法第二十二条第三款创造性的规定。

3. 权利要求3和4的附加技术特征被对比文件1披露了（见说明书第21页第3-7行），由此当其引用的权利要求1没有创造性时，权利要求3和4不符合专利法第二十二条第三款的规定。

4. 权利要求5的附加技术特征被对比文件1披露了（见说明书第23页第30行），由此权利要求5引用的权利要求3没有创造性时，其也不符合专利法第二十二条第三款创造性的规定。

7. 权利要求6-8的附加技术特征属于传感器在检测过程中客观必然发生的情况，因此当其引用的权利要求3没有创造性时，其也不符合专利法第二十二条第三款创造性的规定。

综上所述，本申请仍无授权前景。申请人应针对上述缺陷进行修改或陈述理由，并须提交修改对照页，注意修改不要超出原权利要求和说明书的记载范围，并针对修改后的权利要求，对说明书作适应性修改，以使说明书在形式上支持权利要求。如果坚持不改或理由陈述不充分，根据专利法第三十八条的规定，本申请将被驳回。

审查员：肖霞

电话：82755450

발송번호: 9-5-2007-053759192
발송일자: 2007. 10. 05

수신 서울특별시 강남구 역삼동 648-23 여삼빌
딩 4층

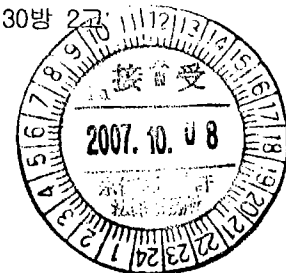
권태복

135-080

YOUR INVENTION PARTNER

특 허 청
특허결정서

출원인명칭	캐논 가부시끼가이샤 (출원인코드: 519980959073)
주 소	일본 도쿄도 오오따구 시모마루교 3쵸메 30방 2고
대리인명칭	권태복 외 1 명
주 소	서울특별시 강남구 역삼동 648-23 여삼빌딩 4층
발명자성명	수기타 미츠로
주 소	일본국 도쿄도 오오따구 시모마루교 3쵸메 30방 2고
	캐논가부시끼가이샤 나이
출원번호	10-2005-7006239
발명의명칭	센서
청 구	항 16



이 출원은 특허법 제66조의 규정에 의하여 특허결정합니다.
(특허법 제87조의 규정에 따라 특허권은 특허료를 납부하여 설정등록함으로써 발생하게 됩니다.) 끝.

[우선권주장]

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[참고문헌]

1. US5754333
2. JP10284806

2007. 10. 05

특허청

기계금속건설심사본부
정밀기계심사팀

심사관

정진수



<<특허등록료, 실용신안등록료 납부, FD(플로피디스크제출 및 특허기술상신청안내)>>

※ 등록료 납부안내

1. 특허료 납부예정금액(1~3년차분) : 945,000 원(1~3년차분을 정상납부기간내에 납부하는 경우), 472,500 원(50% 감면대상자인 경우), 283,500 원(70% 감면대상자인 경우)

* 특허료의 정상납부기간을 경과하여 추가납부하거나, 특허료납부기간 중 특허료의 변경요인이 있을 때에는 위 납부금액이 달라질 수 있습니다.

2. 납부기간 : 이 특허결정서를 받은 날로부터 3월 이내에 최초 3년분의 특허료를 일시에 납부하여야 하며, 이 납부기간이 경과한 후에는 6월이내(추가납부기간)에 한하여 2배의 금액을 납부하여야 합니다. 이 추가납부기간도 경과하면 출원포기로 간주되어 등록받을 수 없습니다.

3. 납부방법 :

① 「납입고지서 및 영수증」을 이용하는 방법 : 특허결정서와 함께 송달받은 「납입고지서 및 영수증」상의 정상납부일까지 은행, 우체국 등 국고수납기관 또는 인터넷지로서사이트(<http://giro.or.kr>)에서 특허료를 납부합니다.

② 특허료납부서를 이용하는 방법 : 특허료납부서를 특허청(서울사무소)에 먼저 제출한 후 부여받은 접수번호를 납부자번호로 하여 제출일의 다음날까지 은행, 우체국 등 국고수납기관 또는 인터넷지로서사이트(<http://giro.or.kr>)에서 특허료를 납부합니다. 다만, 특허료납부서를 우편으로 제출하려는 경우에는 특허료에 해당하는 통상환증서를 함께 보내셔야 합니다.

* 보내실 곳 : 우)302-701 대전광역시 서구 둔산동 920 특허청 등록서비스팀

4. 국민기초생활보장법상 수급자, 학생, 소기업, 중소기업 등이 특허료를 감면받고자 하는 경우에는 특허료납부서와 함께 감면 또는 면제 대상임을 입증하는 서류를 제출한 후 특허료를 납부하여야 하고, 일부청구항을 포기하려는 자는 특허료납부서와 함께 일부청구항포기서를 제출한 후 특허료를 납부하여야 합니다.

※ FD출원

- FD출원 후 특허결정의 등본을 받기 전에 보정을 한 자는 특허료납부서 제출시까지 보정내용의 전부나 반영된 최종본의 FD 1통을 첨부하여 민원실에 제출하여야 합니다.

※ 특허기술상은 내국인의 경우, 이의신청기간만료일로부터 설정등록 후 2년이내에 해당 심사팀에 추천의뢰신청을 할 수 있습니다.

※ 서식 또는 절차에 대하여는 특허고객 콜센터(☎1544-8080)로 문의하시기 바라며, 기타 문의사항이 있으시면 ☎ 042)481-8283(담당심사관 정진수)로 문의하시기 바랍니다.

※ 우 302-701 대전광역시 서구 선사로 139(둔산동 920) 정부대전청사 특허청